

REMARKS

Reconsideration and allowance of the present patent application based on the foregoing amendments and following remarks are respectfully requested. Since this Amendment is being presented together with a Request for Continued Examination, entry of this Amendment is respectfully requested.

By this Amendment, claims 1 and 8 are amended. Support for the amendment to claims 1 and 8 may be found, for example, on pages 10, lines 20-27, page 11, lines 1-7 and pages 13-14 of the specification. No new matter has been added. After entry of this Amendment, claims 1, 3, 8-10 and 23-24 will remain pending in the present patent application.

Claims 1, 3, 8-10 and 23-24 were rejected under 35 U.S.C. §103(a) based on Tanaka *et al.* (U.S. Pat. No. 5,486,967) ("Tanaka") in view of Sakai *et al.* (U.S. Pat. No. 4, 656, 533) ("Sakai"). The rejection is respectfully traversed.

Claim 1 recites a disk drive comprising, *inter alia*, an adjusting circuit constructed and arranged to adjust a low cut-off frequency of the signal output from the read amplifier, the adjusting circuit including a programmable filter configured to set the low cut-off frequency of the recording frequency of the disk medium and to remove frequencies in the amplified signal lower than the cut-off frequency. As conceded by the Examiner on page 3 of the Office Action, Tanaka fails to teach or suggest such an adjusting circuit. The Examiner then relied on Sakai as allegedly teaching this feature. However, Sakai fails to remedy the deficiencies of Tanaka and teaches away from such a feature. Sakai discloses a floppy disk drive including a pre-amplifier and a low pass filter 19. The low pass filter 19 is, however, a device configured to remove unwanted frequencies/signals higher than the cut-off frequency. In that regard, Sakai discloses that the disk drive makes fine adjustment of the cut-off frequency of the low pass filter so as to remove the noise generated due to a high frequency. (See col. 4, lines 62-68, where the cut-off frequency is adjusted to be within the range of 300kHz to 400kHz). Sakai is silent about an adjusting circuit configured to remove frequencies in the amplified signal lower than the cut-off frequency, as claimed in claim 1. Therefore, any reasonable combination of Tanaka and Sakai does not, in any way, result in the invention of claim 1.

It is also noted that the adjusting circuit of claim 1 is not a circuit configured to adjust the cut-off frequency of a low pass filter, but a circuit configured to adjust a low cut-off frequency of a read signal output from a read amplifier (namely, a read signal waveform). In

addition, contrary to Sakai, the adjusting circuit of claim 1 is configured to adjust the cut-off frequency to 1/2000 or less of the maximum recording frequency of the perpendicular magnetic recording wherein the maximum recording frequency is, for example, 200 MHz. The adjusting circuit of the present invention is intended to improve a read error rate by reducing the waveform deformation of the read signal of the perpendicular recording. It is submitted that the low pass filter of Sakai cannot be directly applied to a preamplifier device used for the perpendicular magnetic recording of the present invention.

Claims 3 and 23 are patentable by virtue of their dependency from claim 1 and for the additional features recited therein.

Claim 8 is patentable over Tanaka, Sakai or a combination thereof for at least the same reasons provided above related to claim 1 and for the additional features recited therein. Namely, claim 8 is patentable over Tanaka, Sakai or a combination thereof at least because this claim recites a preamplifier device comprising, *inter alia*, an adjusting circuit including a programmable filter configured to set the low cut-off frequency of the recording frequency of the disk medium and to remove frequencies in the amplified signal lower than the low cut-off frequency. Claims 9-10 and 24 are patentable by virtue of their dependency from claim 8 and for the additional features recited therein.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3, 8-10 and 23-24 under 35 U.S.C. §103(a) based on Tanaka in view of Sakai are respectfully requested.

The rejection having been addressed, Applicants request issuance of a notice of allowance indicating the allowability of all pending claims. If anything further is necessary to place the application in condition for allowance, Applicants request that the Examiner contact Applicants' undersigned representative at the telephone number listed below.

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Respectfully submitted,
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